

APPLICATION NO.

10/613,800

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

	www.uspto.gov	
FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
Rodger H. Rast	· MOTOG2	7368
	EXAMINER	

**Rastar Corporation** Suite 301, MS 337 11230 Gold Express Drive Gold River, CA 95670-4484

7590

FILING DATE

07/05/2003

09/07/2005

ART UNIT PAPER NUMBER

MUROMOTO JR, ROBERT H

3765

DATE MAILED: 09/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)		
	10/613,800	RAST, RODGER H.		
Office Action Summary	Examiner	Art Unit		
·	Robert H. Muromoto, Jr.	3765		
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address		
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from to become ABANDONED	l. ely filed the mailing date of this communication. D (35 U.S.C. § 133).		
Status				
1) Responsive to communication(s) filed on 14 Ju	Responsive to communication(s) filed on <u>14 June 2005</u> .			
2a) This action is <b>FINAL</b> . 2b) ⊠ This	action is non-final.			
Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.		
Disposition of Claims				
<ul> <li>4)  Claim(s) 1-20 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdray</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-20 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or</li> </ul>	vn from consideration.			
Application Papers	•			
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the conference of Replacement drawing sheet(s) including the correction of the original transfer of the conference of the conferenc	epted or b) objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is objected	37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).		
Priority under 35 U.S.C. § 119				
12) ☐ Acknowledgment is made of a claim for foreign     a) ☐ All b) ☐ Some * c) ☐ None of:     1 ☐ Certified copies of the priority documents     2. ☐ Certified copies of the priority documents     3. ☐ Copies of the certified copies of the priorical application from the International Bureau * See the attached detailed Office action for a list of the certified copies.	s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No d in this National Stage		
Attachment(s)				
Notice of References Cited (PTO-892)   Notice of Draftsperson's Patent Drawing Review (PTO-948)   Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)   Paper No(s)/Mail Date	4) Interview Summary ( Paper No(s)/Mail Dat 5) Notice of Informal Pa 6) Other:	te		

### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4-6, 10-12, 18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Shek 5,105,490.

Shek discloses an apparatus for supporting the human body and in particular to a massage apparatus withing the apparatus. The apparatus comprises beads made preferably of a relatively hard (abrasion resistant) material, such as wood, plastic or rubber. The beads are spherical (rounded), oval, elongated or irregular in shape. The beads are disposed in orthogonal, diagonal or irregular (2-dimensional) array.

Each of the beads has a through hole whereby the beads are adapted to be linked up together by string or line means. The strings are made of flexible and high tensile material such as thread, nylon and steel wire.

The beads can also be secured to a sheet member fabricated of cloth, of nylon or other suitable materials (cloth is well known to produce garments).

The size of the beads may vary and preferably are in the range of 5mm-40mm in dimension.

Application/Control Number: 10/613,800

Art Unit: 3765

The strings are made of a flexible and high tensile material, such as thread, nylon, or steel wire so as to hold the beads in a fixed position with respect to one another (claim 5 and 10).

The wires clearly go through the center of the beads or a 'material portion' of the beads, as seen in figure 4.

The recited tensile strength range in claim 11, is considered inherent to the disclosure of Shek. A nylon or steel wire would certainly fall into the broadly recited range.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3, 7, 8, 13-17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shek in view of Ashtiani 6,849,016.

Although Shek teaches essentially all of the limitations of the claimed invention, Shek does not specifically mention UHMW polyethylene as the bead material, bead coefficient of friction, pliant material inserts in the bead, injection molding the beads on the cords, a first and second material for the beads, or spacing between the beads.

However, Ashtiani teaches an over-molded beaded cable. Referring to figs. 1, 2, and 3, the internal and external structure of the cable is shown. The beaded cable includes an inner cable 32 with a plurality of inner bead members 34 disposed

therearound. The cable may also include an outer jacket 36, surrounding the inner calbe and the inner bead members. The outer jacket 36 may be comprised of elastomeric (pliant) compounds. An interior surface of the outer jacket 36 is in contact with the exterior surface of the inner cable member and surrounds the inner cable member and the inner bead members. The outer jacket corresponds to the pliant material insert recited in claim 8 and the second material in claim14 and 15.

Further each outer bead member encases an inner core structure. The inner bead members and the outer bead members are placed in a pattern of distance intervals. The exact distance and placement pattern of the beads is determined by the particular application and may obviously vary. The inner and outer bead members can be formed in a various number of ways including injection (injection molding), pultrusion, clamping or other means known in the art determined by the particular application of the end product.

The inner and outer beads can be made from various materials that provide sufficient hardness (abrasion resistance). Among the cited materials, Ashtiani, teaches liquid crystal polymer and polyethylene. UHMW polyethylene is a liquid crystal form of the polymer polyethylene.

The limitations recited in claim 7 are a product variable that is considered to be inherent to the teachings of Ashtiani and Shek. The teaching provide all of the structural limitations of the claimed invention and it follows that the product would also provide the same product variables as those recited in claim 7.

The beaded cable of Ashtiani, uses this construction to provide a strong, yet flexible beaded cable, with increased pulling strength (transference of forces). The structure would certainly provide abrasion resistance as the bead material is stated to include liquid crystal polyethylene. Since the beaded cable of Ashtiani and Shek are both aimed at providing a beaded structure with increased strength and they are both so visibly structurally similar, the examiner considers the two references clearly within the same technical problem solving field.

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to use the teachings of Ashtiani to provide increased pulling strength (ability to transfer forces within the structure) to the beaded structure taught by Shek.

### Response to Arguments

Applicant's arguments with respect to claims above have been considered but are most in view of the new ground(s) of rejection.

Applicant has overcome any double patenting rejections by filing a terminal disclaimer.

The examiner has presented new rejections above, therefore the rejection is considered to be non-final.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert H. Muromoto, Jr. whose telephone number is 571-272-4991. The examiner can normally be reached on 8-530, M-F.

Application/Control Number: 10/613,800 Page 6

Art Unit: 3765

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Calvert can be reached on 703-305-1025. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bhm August 29, 2005

> JOHRAN CALVERT SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3700